Journal of Crystal Growth 136 (1994) 381–386
North-Holland

JOURNAL OF CRYSTAL GROWTH

Author index

Abe, T., see Sasaki 136 (1994) 162
Abernathy, C.R., F. Ren, S.J. Pearton, P.W. Wisk, D.A. Bohling, G.T. Muhr, A.C. Jones, M. Stavola and D.M. Kozuch, The impact of impurity incorporation on heterojunction bipolar transistors grown by metalorganic molecular beam epitaxy 136 (1994) 11
Abernathy, C.R., see Bohling 136 (1994) 118
Alexandre, F., D. Zerguine, P. Launay, J.L. Benchimol, M. Berz, B. Sermage, D. Komatitsch and M. Juhel, Quasi-planar GaAs heterojunction bipolar transistor device entirely grown by chemical beam epitaxy 136 (1994) 235
Antolini, A., see Rigo 136 (1994) 293
Aoyagi, Y., see Zhang 136 (1994) 200
Aoyama, T., T. Ikarashi, K. Miyanaga and T. Tatsumi, Facet formation mechanism of silicon selective epitaxial layer by Si ultrahigh vacuum chemical vapor deposition 136 (1994) 349
Araujo, D., see Rudra 136 (1994) 173
Asahi, H., see Okuno 136 (1994) 83
Asahi, H., see Marx 136 (1994) 204
Asahi, H., see Liu 136 (1994) 250
Asahi, H., M. Enokida, K. Asami, J.H. Kim, T. Watanabe, R.K. Soni and S. Gonda, Gas source molecular beam epitaxy growth of GaP/AlP short period superlattices 136 (1994) 268
Asahi, H., see Kim 136 (1994) 310
Asami, K., see Asahi 136 (1994) 268
Asami, K., see Kim 136 (1994) 310

Balk, P., see Werner 136 (1994) 322
Balk, P., see Werner 136 (1994) 338
Barber, R., see Sudersena Rao 136 (1994) 179
Beam III, E.A., H.F. Chau, T.S. Henderson, W. Liu and A.C. Seabaugh, The use of organometallic group-V sources for the metalorganic molecular beam epitaxy growth of $In_{0.48}Ga_{0.52}P/GaAs$ and $In_{0.53}Ga_{0.47}As/InP$ heterojunction bipolar device structures 136 (1994) 1
Benchimol, J.L., see Alexandre 136 (1994) 235
Benyon, B., see Sudersena Rao 136 (1994) 179
Berz, M., see Alexandre 136 (1994) 235
Bhattacharya, P.K., see Chen 136 (1994) 50
Bhatacharya, P.K., see Munns 136 (1994) 166
Bohling, D.A., see Abernathy 136 (1994) 11
Bohling, D.A., C.R. Abernathy and K.F. Jensen, Chemical/surface mechanistic considerations in the design of novel precursors for metalorganic molecular beam epitaxy 136 (1994) 118
Bonard, J.M., see Rudra 136 (1994) 173
Bove, P., K. Ono, K. Joshin, H. Tanaka, K. Kasai and J. Komeno, Chemical beam epitaxy selectively-regrown n^+-GaAs layer on metalorganic chemical vapor deposition grown GaInP/GaInAs/GaAs pseudomorphic high electron mobility transistor structure 136 (1994) 261
Buchegger, C., see Rothfritz 136 (1994) 225
Butzke, S., see Werner 136 (1994) 322
Butzke, S., see Werner 136 (1994) 338

Cacciatore, C., see Rigo 136 (1994) 293
Carlin, J.F., see Rudra 136 (1994) 278
Chau, H.F. see Beam 136 (1994) 1
Chen, W.L., G.O. Munns, L. Davis, P.K. Bhattacharya and G.I. Haddad, The growth of resonant tunneling hot electron transistors using chemical beam epitaxy 136 (1994) 50
Chen, W.L., see Munns 136 (1994) 166
Chen, Y.K., R. Kapre, W.T. Tsang, A. Tate, D.A. Humphrey and L. Fan, Carbon-doped InGaP/GaAs/InGaP double heterojunction bipolar transistors with a very low $1/f$ noise corner frequency of 108 kHz grown by chemical beam epitaxy 136 (1994) 221
Chin, T.P., see Tu 136 (1994) 191
Chiu, T.H., M.D. Williams, F.G. Storz and J.F. Ferguson, Chemical beam epitaxial growth of InGaAs using a new precursor tri-isopropylgallium 136 (1994) 148
Chiu, T.H., see Cunningham 136 (1994) 282
Chow-Chong, P., see Sudersena Rao 136 (1994) 179
Coriasso, C., see Rigo 136 (1994) 293
Cui, J., see Zhang 136 (1994) 200
Cunningham, J.E., M.B. Santos, K.W. Goossen, T.H. Chiu, M.D. Williams, W. Jan and F. Storz, Strain and As species dependent Group V incorporation in GaAsP during gas source molecular beam epitaxy 136 (1994) 282

Davies, G.J., see Levoguer 136 (1994) 109
Davies, G.J., P.J. Skevington, J.C. Morris, A.C. Jones, S. Rushworth, J.S. Foord and C.L. Levoguer, Some comparisons of chemical beam epitaxy InGaAs/InP growth using triethylgallium, triisopropylgallium and triisobutylgallium sources 136 (1994) 133
Davies, M., see Houghton 136 (1994) 56
Davies, M., see Sudersena Rao 136 (1994) 179
Davis, L., see Chen 136 (1994) 50
Davis, L., see Munns 136 (1994) 166
De Fays, M., see Rudra 136 (1994) 173
Dion, M., see Houghton 136 (1994) 56

Eicher, S., see Moore 136 (1994) 230
Endoh, Y., see Imaizumi 136 (1994) 366
Enokida, M., see Asahi 136 (1994) 268

Fan, L., see Chen 136 (1994) 221
Fang, S.F., see Hariu 136 (1994) 157
Ferguson, J.F., see Chiu 136 (1994) 148
Foord, J.S., see Levoguer 136 (1994) 109
Foord, J.S., T.J. Whitaker, D. O'Hare and A.C. Jones, Investigations of the growth of GaAs using stable adducts of gallane 136 (1994) 127
Foord, J.S., see Davies 136 (1994) 133
Foster, B., see Sudersena Rao 136 (1994) 179
Freer, R.W., see Martin 136 (1994) 69
Fujii, K., see Miyakoshi 136 (1994) 152
Fujita, Sg., see Kawakami 136 (1994) 371
Fujita, Sz., see Kawakami 136 (1994) 371
Fukatsu, S., N. Usami, Y. Kato, H. Sunamura, Y. Shiraki, H. Oku, T. Ohnishi, Y. Ohmori and K. Okumura, Gas-source molecular beam epitaxy and luminescence characterization of strained $Si_{1-x}Ge_x$/Si quantum wells 136 (1994) 315
Fukatsu, S., see Kato 136 (1994) 355
Fukuma, Y., see Sasaki 136 (1994) 162
Fuyuki, T., see Hatayama 136 (1994) 333

Ganière, J.D., see Rudra 136 (1994) 173
Gonda, S., see Okuno 136 (1994) 83
Gonda, S., see Marx 136 (1994) 204
Gonda, S., see Liu 136 (1994) 250
Gonda, S., see Asahi 136 (1994) 268
Gonda, S., see Kim 136 (1994) 310
Goossen, K.W., see Cunningham 136 (1994) 282
Goto, S., H. Ohno, Y. Nomura, Y. Morishita and Y. Katayama, Adsorption of carbon-related species onto GaAs(001), (011), and (111) surfaces exposed to trimethylgallium 136 (1994) 104
Gotoda, M., Y. Nomura, T. Isu and S. Maruno, Optical properties of InGaAs/InP double-heterostructures selectively grown by chemical beam epitaxy 136 (1994) 246
Gräber, J., see Mörsch 136 (1994) 256
Guo, H., see Yan 136 (1994) 306

Haddad, G.I., see Chen 136 (1994) 50
Haddad, G.I., see Munns 136 (1994) 166
Hamada, T., see Hariu 136 (1994) 157
Hariu, T., S. Yamauchi, S.F. Fang, T. Ohshima and T. Hamada, Plasma-cracked supply of group V and group VI elements for low temperature epitaxy 136 (1994) 157
Hashimoto, T., see Yoshimoto 136 (1994) 89
Hatayama, T., Y. Tarui, T. Yoshinobu, T. Fuyuki and H. Matsunami, Controlled carbonization of Si(001) surface using hydrocarbon radicals in ultrahigh vacuum 136 (1994) 333
Heinecke, H., Selective area growth of III/V materials in metalorganic molecular beam epitaxy (chemical beam epitaxy) 136 (1994) 18
Henderson, T.S., see Beam 136 (1994) 1
Hidaka, T., see Miyakoshi 136 (1994) 152
Hiraoka, Y.S. and M. Mashita, Ab initio study on the reaction of trimethylgallium with hydrogen molecule 136 (1994) 94
Hiyamizu, S., see Marx 136 (1994) 204
Hollfelder, M., see Mörsch 136 (1994) 256
Horie, T., Y. Takakuwa, T. Yamaguchi and N. Miyamoto, Hydrogen desorption rate and surface hydrogen coverage during isothermal annealing for Si_2H_6-adsorbed Si(100) surfaces 136 (1994) 344
Hosomi, K., see Mozume 136 (1994) 287
Houdré, R., see Rudra 136 (1994) 278
Houghton, D.C., M. Davies, T. Sudersena Roa and M. Dion, Comparison of chemical beam epitaxy and metalorganic chemical vapour deposition for highly strained multiple quantum well InGaAsP/InP 1.5 μm lasers 136 (1994) 56
Houng, Y.M., M.R.T. Tan, B.W. Liang, S.Y. Wang, L. Yang and D.E. Mars, InGaAs (0.98 μm)/GaAs vertical cavity surface emitting laser grown by gas-source molecular beam epitaxy 136 (1994) 216
Hu, J., see Moore 136 (1994) 230
Huang, Y., see Yan 136 (1994) 306
Humphrey, D.A., see Chen 136 (1994) 221

Iga, K., see Miyamoto 136 (1994) 210
Iga, K., see Inaba 136 (1994) 297
Iga, K., see Yokouchi 136 (1994) 302
Iga, R., see Sugiura 136 (1994) 64
Iga, R., see Mitsuhara 136 (1994) 195
Iga, R., T. Yamada and H. Sugiura, A new technique for fabricating InGaAsP superlattice by laser-assisted metalorganic molecular beam epitaxy 136 (1994) 273

Ikarashi, T., see Aoyama 136 (1994) 349
Ikuta, K., J. Osaka and H. Yokoyama, Morphology on GaAs surfaces grown by metalorganic chemical vapor deposition and molecular beam epitaxy 136 (1994) 114
Ilegems, M., see Rudra 136 (1994) 173
Ilegems, M., see Rudra 136 (1994) 278
Imaizumi, M., Y. Endoh, K. Ohtsuka and T. Isu, Growth of n- and p-ZnSe by gas source molecular beam epitaxy using metal Zn and H_2Se 136 (1994) 366
Inaba, Y., T. Uchida, N. Yokouchi, T. Miyamoto, K. Mori and F. Koyama and K. Iga, Growth of GaInAs(P)/InP multiquantum barrier by chemical beam epitaxy 136 (1994) 297
Inaba, Y., see Yokouchi 136 (1994) 302
Inoue, K., see Marx 136 (1994) 204
Inoue, K., see Liu 136 (1994) 250
Inoue, M., see Kim 136 (1994) 310
Isu, T., see Gotoda 136 (1994) 246
Isu, T., see Imaizumi 136 (1994) 366

Jan, W., see Cunningham 136 (1994) 282
Jensen, K.F., see Bohling 136 (1994) 118
Jones, A.C., see Abernathy 136 (1994) 11
Jones, A.C., see Foord 136 (1994) 127
Jones, A.C., see Davies 136 (1994) 133
Jones, T.S., see Kaneko 136 (1994) 99
Joshin, K., see Bove 136 (1994) 261
Joyce, B.A., see Kaneko 136 (1994) 99
Juhel, M., see Alexandre 136 (1994) 235
Junno, B., G. Paulsson, M. Miller and L. Samuelson, Reflection high energy electron diffraction and reflectance difference studies of surface anisotropy in In GaAs chemical beam epitaxy on flat and vicinal (001)GaAs 136 (1994) 78

Kamp, M., see Mörsch 136 (1994) 256
Kaneko, T., O. Naji, T.S. Jones and B.A. Joyce, The role of excess arsenic during the metalorganic molecular beam epitaxial growth of GaAs from trimethylgallium and As_2 136 (1994) 99
Kapre, R., see Tsang 136 (1994) 42
Kapre, R., see Chen 136 (1994) 221
Kasai, K., see Bove 136 (1994) 261
Kashima, H., see Mozume 136 (1994) 287
Katayama, Y., see Goto 136 (1994) 104
Kato, Y., see Fukatsu 136 (1994) 315
Kato, Y., S. Fukatsu, N. Usami and Y. Shiraki, A $Si_{1-x}Ge_x$/Si single quantum well p–i–n structure grown by solid-source and gas-source "hybrid" Si molecular beam epitaxy 136 (1994) 355
Kawakami, Y., T. Toyoda, Sz. Fujita and Sg. Fujita, Effect of photo-irradiation on the growth of ZnSe in metalorganic molecular beam epitaxy 136 (1994) 371
Kawanishi, H., see Yoshida 136 (1994) 37
Kim, J.H., see Asahi 136 (1994) 268
Kim, S.G., H. Asahi, M. Seta, K. Asami, S. Gonda, M. Yano and M. Inoue, Optical properties of InAs/AlSb superlattices grown by gas source molecular beam epitaxy 136 (1994) 310
Kitagawa, M., see Sasaki 136 (1994) 162
Knightly, D., see Munns 136 (1994) 166
Kobayashi, M., see Tokita 136 (1994) 376
Komatitsch, D., see Alexandre 136 (1994) 235
Komeno, J., see Bove 136 (1994) 261
Konagai, M., see Shirakashi 136 (1994) 186
Kong, M., see Yan 136 (1994) 306
Koyama, F., see Inaba 136 (1994) 297
Koyama, F., see Yokouchi 136 (1994) 302
Kozuch, D.M., see Abernathy 136 (1994) 11

Lacelle, C., see Sudersena Rao 136 (1994) 179
Lane, P.A., see Martin 136 (1994) 69
Launay, P., see Alexandre 136 (1994) 235
Lazzarini, L., see Rigo 136 (1994) 293
Lee, E.H., see Park 136 (1994) 138
Lee, E.H., see Park 136 (1994) 143
Lester, T.P., see Moore 136 (1994) 230
Levoguer, C.L., J.S. Foord, G.J. Davies and P.J. Skevington, Modulated molecular beam mass spectrometry studies of the growth of GaAs and $In_xGa_{1-x}As$ using tri-isobutylgallium 136 (1994) 109
Levoguer, C.L., see Davies 136 (1994) 133
Li, X., see Yan 136 (1994) 306
Liang, B.W., see Tu 136 (1994) 191
Liang, B.W., see Houng 136 (1994) 216
Ling, J., see Rudra 136 (1994) 173
Liu, W., see Beam 136 (1994) 1
Liu, X.F., see Marx 136 (1994) 204
Liu, X.F., H. Asahi, Y. Okuno, D. Marx, K. Inoue and S. Gonda, Selective area epitaxy of GaSb and AlGaSb by metalorganic molecular beam epitaxy 136 (1994) 250
Lüth, H., see Mörsch 136 (1994) 256

Mars, D.E., see Houng 136 (1994) 216
Martin, T., R.W. Freer, C.R. Whitehouse and P.A. Lane, Advances in the understanding of chemical beam epitaxy growth meachnisms 136 (1994) 69
Maruno, S., see Gotoda 136 (1994) 246
Mashita, M., see Hiraoka 136 (1994) 94
Marx, D., H. Asahi, X.F. Liu, Y. Okuno, K. Inoue, S. Gonda, S. Shimomura and S. Hiyamazu, Metalorganic molecular beam epitaxy growth of GaAs on patterned GaAs substrates 136 (1994) 204

Marx, D., see Liu 136 (1994) 250
Matsunami, H., see Yoshimoto 136 (1994) 89
Matsunami, H., see Hatayama 136 (1994) 333
McCaffery, J., see Sudersena Rao 136 (1994) 179
Miller, M., see Junno 136 (1994) 78
Miner, C.J., see Moore 136 (1994) 230
Misawa, S., see Okumura 136 (1994) 361
Mitsuhara, M., M. Okamoto, R. Iga, T. Yamada and H. Sugiura, InP and related compounds grown on (110) InP substrates by metalorganic molecular beam epitaxy (chemical beam epitaxy) 136 (1994) 195
Miyakoshi, K., K. Fujii, T. Hidaka, I. Suemune, M. Nakagawa and T. Ogawa, Comparison of triethylgallium and its amine-adduct on gas-phase reaction with trimethylamine-alane 136 (1994) 152
Miyamoto, N., see Takakuwa 136 (1994) 328
Miyamoto, N., see Horie 136 (1994) 344
Miyamoto, T., T. Uchida, N. Yokouchi and K. Iga, Surface emitting lasers grown by chemical beam epitaxy 136 (1994) 210
Miyamoto, T., see Inaba 136 (1994) 297
Miyamoto, T., see Yokouchi 136 (1994) 302
Miyanaga, K., see Aoyama 136 (1994) 349
Miyano, A., see Shirakashi 136 (1994) 186
Moore, W.T., A.J. SpringThorpe, T.P. Lester, S. Eicher, R.K. Surridge, J. Hu and C.J. Miner, The effect of emitter layer variations on the current gain of AlGaAs–GaAs heterojunction bipolar transistors grown by chemical beam epitaxy 136 (1994) 230
Mori, K., see Inaba 136 (1994) 297
Mori, K., see Yokouchi 136 (1994) 302
Morishita, Y., see Goto 136 (1994) 104
Morris, J.C., see Davies 136 (1994) 133
Mörsch, G., J. Gräber, M. Kamp, M. Hollfelder and H. Lüth, The selectively grown permeable junction base transistor with a gate of highly carbon doped GaAs 136 (1994) 256
Mozume, T., H. Kashima, K. Hosomi, K. Ogata, K. Suenaga and A. Nakano, Gas source molecular beam epitaxy and X-ray absorption fine structure characterization of InGaAs/InP short period superlattices 136 (1994) 287
Muhr, G.T., see Abernathy 136 (1994) 11
Müller, R., see Rothfritz 136 (1994) 225
Munns, G.O., see Chen 136 (1994) 50
Munns, G.O., W.L. Chen, M.E. Sherwin, D. Knightly, G.I. Haddad, L. Davis and P.K. Bhattacharya, Influence of hydride purity on InP and InAlAs grown by chemical beam epitaxy 136 (1994) 166
Naji, O., see Kaneko 136 (1994) 99
Nakagawa, M., see Miyakoshi 136 (1994) 152
Nakano, A., see Mozume 136 (1994) 287
Nomura, Y., see Goto 136 (1994) 104
Nomura, Y., see Gotoda 136 (1994) 246
Ogata, K., see Mozume 136 (1994) 287
Ogawa, T., see Miyakoshi 136 (1994) 152
O'Hare, D., see Foord 136 (1994) 127
Ohmori, Y., see Fukatsu 136 (1994) 315
Ohnishi, T., see Fukatsu 136 (1994) 315
Ohno, H., see Goto 136 (1994) 104
Ohshima, T., see Hariu 136 (1994) 157
Ohtsuka, K., see Imaizumi 136 (1994) 366
Okahisa, T., see Okumura 136 (1994) 361
Okamoto, M., see Mitsuhara 136 (1994) 195
Oku, H., see Fukatsu 136 (1994) 315
Okumura, H., S. Misawa, T. Okahisa and S. Yoshida, Epitaxial growth of cubic and hexagonal GaN by gas source molecular beam epitaxy using a microwave plasma nitrogen source 136 (1994) 361
Okumura, K., see Fukatsu 136 (1994) 315
Okuno, Y., H. Asahi and S. Gondo, Theoretical consideration on the metalorganic molecular beam epitaxy growth mechanism of III–V semiconductors by molecular orbital calculation 136 (1994) 83
Okuno, Y., see Marx 136 (1994) 204
Okuno, Y., see Liu 136 (1994) 250
Ono, K., see Bove 136 (1994) 261
Osaka, J., see Ikuta 136 (1994) 114
Park, S.J., J.R. Ro, J.K. Sim and E.H. Lee, Monoethylarsine as a novel replacement for unprecracked arsine source in the chemical beam epitaxial growth of GaAs using trimethylgallium and triethylgallium 136 (1994) 138
Park, S.J., J.R. Ro, J.K. Sim and E.H. Lee, Low carbon incorporation in GaAs grown by chemical beam epitaxy using unprecracked arsine, trimethylgallium and triethylgallium 136 (1994) 143
Paulsson, G., see Junno 136 (1994) 78
Pearton, S.J., see Abernathy 136 (1994) 11
Radelaar, S., see Werner 136 (1994) 322
Radelaar, S., see Werner 136 (1994) 338
Ren, F., see Abernathy 136 (1994) 11
Rigo, C., A. Antolini, C. Cacciatore, C. Coriasso, L. Lazzarini and G. Salviati, Growth parameter optimization of short period (< 50 Å) InGaAs/InP short period superlattices by chemical beam epitaxy for photonic devices 136 (1994) 293

Ro, J.R., see Park 136 (1994) 138
Ro, J.R., see Park 136 (1994) 143
Rolfe, S.J., see Sudersena Rao 136 (1994) 179
Roth, A.P., see Sudersena Rao 136 (1994) 179
Rothfritz, H., R. Müller, C. Buchegger, G. Tränkle and G. Weimann, Chemical beam epitaxial growth of GaInAs(P)/InP heterostructures for laser applications 136 (1994) 225
Rudra, A., H. Sugiura, J. Ling, J.M. Bonard, J.D. Ganière, M. de Fays, D. Araujo and M. Ilegems, One-step growth of buried heterostructures by chemical beam epitaxy over patterned InP substrates 136 (1994) 173
Rudra, A., R. Houdré, J.F. Carlin and M. Ilegems, Dynamics of island formation in the growth of InAs/InP quantum wells 136 (1994) 278
Rushworth, S., see Davies 136 (1994) 133

Salviati, G., see Rigo 136 (1994) 293
Samuelson, L., see Junno 136 (1994) 78
Santos, M.B., see Cunningham 136 (1994) 282
Sasaki, M., see Yoshida 136 (1994) 37
Sasaki, M. and S. Yoshida, Surface reactivity and stability of Ga-deposited GaAs oxide mask for selective area growth of GaAs 136 (1994) 241
Sasaki, Y., Y. Fukuma, T. Abe, Z. Zhu, T. Yao, J. Takehara and M. Kitagawa, Metalorganic molecular beam epitaxy of III–V compounds using tertiarybutyl-V as group-V sources 136 (1994) 162
Sciortino, Jr., P.F., see Tsang 136 (1994) 42
Seabaugh, A.C., see Beam 136 (1994) 1
Sermage, B., see Alexandre 136 (1994) 235
Seta, M., see Kim 136 (1994) 310
Sherwin, M.E., see Munns 136 (1994) 166
Shimomura, S., see Marx 136 (1994) 204
Shirakashi, J., R.T. Yoshioka, A. Miyano, M. Konagai and K. Takahashi, Effect of the addition of an elemental Ga flux on the metalorganic molecular beam epitaxial growth of heavily carbon-doped InGaAs 136 (1994) 186
Shiraki, Y., see Fukatsu 136 (1994) 315
Shiraki, Y., see Kato 136 (1994) 355
Sim, J.K., see Park 136 (1994) 138
Sim, J.K., see Park 136 (1994) 143
Skevington, P.J., see Levoguer 136 (1994) 109
Skevington, P.J., see Davies 136 (1994) 133
Soni, R.K., see Asahi 136 (1994) 268
SpringThorpe, A.J., see Moore 136 (1994) 230
Stavola, M., see Abernathy 136 (1994) 11
Storz, F.G., see Chiu 136 (1994) 148
Storz, F.G., see Cunningham 136 (1994) 282
Sudersena Rao, T., see Houghton 136 (1994) 56
Sudersena Rao, T., C. Lacelle, M. Davies, R. Barber, P. Chow-Chong, J. McCaffery, S.J. Rolfe, A.P. Roth, B. Benyon and B. Foster, Chemical beam epitaxy of InP on planar and non-planar substrates 136 (1994) 179
Suemune, I., see Miyakoshi 136 (1994) 152
Suenaga, K., see Mozume 136 (1994) 287
Sugiura, H., see Yamaguchi 136 (1994) 29
Sugiura, H., K. Wakita, R. Iga and T. Yamada, Electroabsorption and modulator characteristics of InGaAsP multiple quantum well laser structures grown by laser-assisted metalorganic molecular beam epitaxy 136 (1994) 64
Sugiura, H., see Rudra 136 (1994) 173
Sugiura, H., see Mitsuhara 136 (1994) 195
Sugiura, H., see Iga 136 (1994) 273
Sun, D., see Yan 136 (1994) 306
Sunamura, H., see Fukatsu 136 (1994) 315
Surridge, R.K., see Moore 136 (1994) 230

Takahashi, K., see Shirakashi 136 (1994) 186
Takakuwa, Y., T. Yamaguchi and N. Miyamoto, Si dangling bonds on Si(100) surface during gas-source molecular beam epitaxy with Si_2H_6 136 (1994) 328
Takakuwa, Y., see Horie 136 (1994) 344
Takehara, J., see Sasaki 136 (1994) 162
Tan, M.R.T., see Houng 136 (1994) 216
Tanaka, A., see Zhang 136 (1994) 200
Tanaka, H., see Bove 136 (1994) 261
Tarui, Y., see Hatayama 136 (1994) 333
Tate, A., see Chen 136 (1994) 221
Tatsumi, T., see Aoyama 136 (1994) 349
Tokita, S., M. Kobayashi and A. Yoshikawa, In-situ probing the ZnSe metalorganic molecular beam growth process by surface photo-interference method 136 (1994) 376
Toyoda, T., see Kawakami 136 (1994) 371
Tränckle, G., see Rothfritz 136 (1994) 225
Tsang, W.T., R. Kapre and P.F. Sciortino, Jr., In-situ dry etching of InP using phosphorus trichloride and regrowth inside a chemical beam epitaxial growth chamber 136 (1994) 42
Tsang, W.T., see Chen 136 (1994) 221
Tu, C.W., B.W. Liang and T.P. Chin, Heavily carbon-doped p-type GaAs and $In_{0.53}Ga_{0.47}As$ grown by gas-source molecular beam epitaxy using carbon tetrabromide 136 (1994) 191

Uchida, T., see Miyamoto 136 (1994) 210
Uchida, T., see Inaba 136 (1994) 297
Uchida, T., see Yokouchi 136 (1994) 302
Usami, N., see Fukatsu 136 (1994) 315
Usami, N., see Kato 136 (1994) 355

Vaccaro, P., see Yoshimoto 136 (1994) 89

Wakita, K., see Sugiura 136 (1994) 64
Wang, S.Y., see Houng 136 (1994) 216

Warabisako, T., see Yamaguchi 136 (1994) 29
Watanabe, T., see Asahi 136 (1994) 268
Weimann, G., see Rothfritz 136 (1994) 225
Werner, K., S. Butzke, S. Radelaar and P. Balk, Determination of the sticking coefficient of disilane on Si(001) using the first reflection high energy electron diffraction oscillation period 136 (1994) 322
Werner, K., S. Butzke, S. Radelaar and P. Balk, Evidence for non-hydrogen desorption limited growth of Si from disilane at very low temperatures in gas source molecular beam epitaxy? 136 (1994) 338
Whitaker, T.J., see Foord 136 (1994) 127
Whitehouse, C.R., see Martin 136 (1994) 69
Williams, M.D., see Chiu 136 (1994) 148
Williams, M.D., see Cunningham 136 (1994) 282
Wisk, P.W., see Abernathy 136 (1994) 11

Yamada, T., see Sugiura 136 (1994) 64
Yamada, T., see Mitsuhara 136 (1994) 195
Yamada, T., see Iga 136 (1994) 273
Yamaguchi, M., T. Warabisako and H. Sugiura, Chemical beam epitaxy as a breakthrough technology for photovoltaic solar energy applications 136 (1994) 29
Yamaguchi, T., see Takakuwa 136 (1994) 328
Yamaguchi, T., see Horie 136 (1994) 344
Yamauchi, S., see Hariu 136 (1994) 157
Yan, C., D. Sun, H. Guo, X. Li, S. Zu, Y. Huang, Y. Zheng and M. Kong, High-quality InGaP and InGaP/InAlP multiple quantum well growth by gas-source molecular beam epitaxy 136 (1994) 306
Yang, L., see Houng 136 (1994) 216
Yano, M., see Kim 136 (1994) 310
Yao, T., see Sasaki 136 (1994) 162
Yokouchi, N., see Miyamoto 136 (1994) 210
Yokouchi, N., see Inaba 136 (1994) 297
Yokouchi, N., Y. Inaba, T. Uchida, T. Miyamoto, K. Mori, F. Koyama and K. Iga, Composition changes in $Ga_xIn_{1-x}As$/InP superlattice growth by chemical beam epitaxy 136 (1994) 302
Yokoyama, H., see Ikuta 136 (1994) 114
Yoshida, S., M. Sasaki and H. Kawanishi, Selective-area epitaxy of GaAs using a GaN mask in in-situ processes 136 (1994) 37
Yoshida, S., see Sasaki 136 (1994) 241
Yoshida, S., see Okumura 136 (1994) 361
Yoshikawa, A., see Tokita 136 (1994) 376
Yoshimoto, M., T. Hashimoto, P. Vaccaro and H. Matsunami, In-situ reflection high-energy electron diffraction observation of laser-triggered GaP growth in chemical beam epitaxy 136 (1994) 89
Yoshinobu, T., see Hatayama 136 (1994) 333
Yoshioka, R.T., see Shirakashi 136 (1994) 186

Zerguine, D., see Alexandre 136 (1994) 235
Zhang, S., J. Cui, A. Tanaka and Y. Aoyagi, Short-pulse chemical beam epitaxy 136 (1994) 200
Zheng, Y., see Yan 136 (1994) 306
Zhu, Z., see Sasaki 136 (1994) 162
Zu, S., see Yan 136 (1994) 306

Journal of Crystal Growth 136 (1994) 387–388
North-Holland

JOURNAL OF CRYSTAL GROWTH

Subject index

Adducts
– for aluminum gallium arsenide 152
– for gallium arsenide 127, 152
Aluminum
– antimonide 250, 310
– arsenide 50, 83
– gallium arsenide 11, 152, 230
– gallium antimonide 250
– gallium indium phosphide 306
– organic 11, 50, 152, 166, 235, 250
– phosphide 268
Apparatus
– for thin film growth
– – by gas source molecular beam epitaxy
– – – using microwave plasma source
– – – – of gallium nitride 361
– – by metalorganic molecular beam epitaxy
– – – using short pulse
– – – – of gallium arsenide 200
Arsenic
– organic 1, 78, 138, 162, 204

Computer simulation
– of ab initio study of molecular orbital calculations 94
– of metalorganic molecular beam epitaxy 83

Device characterization
– diodes 186, 230, 297, 355
– double heterostructures 1, 11, 221, 225, 230, 235, 246, 287
– electronic materials 11, 50, 138, 143, 166, 230, 261, 293
– lasers 42, 56, 64, 195, 210, 216, 225
– quantum wells 56, 64, 78, 173, 195, 225, 273, 278, 293, 297, 302, 306, 315, 355
– solar cells 29
– transistor 1, 11, 50, 221, 230, 235, 256, 261
Diodes, see Device characterization

Electronic materials, see Device characterization
Epitaxy, see Thin film growth
Etching
– chemical 37, 166, 256
– dry chemical 42

Gallium
– antimonide 250
– arsenide 37, 69, 99, 104, 109, 114, 127, 133, 138, 143, 152, 162, 191, 200, 204, 221, 230, 235, 241, 256, 261
– arsenide phosphide 282
– indium arsenide 18, 133, 225, 302
– indium arsenide phosphide 18, 210, 297
– indium phosphide 221, 261, 306
– nitride 37, 361
– organic 11, 18, 37, 50, 64, 69, 78, 89, 99, 104, 109, 127, 133, 138, 143, 148, 162, 166, 173, 186, 195, 200, 204, 210, 221, 225, 230, 235, 241, 246, 250, 256, 261, 273, 297, 302
– phosphide 89, 268

Indium
– aluminum arsenide 166
– antimonide 157
– arsenide 83, 157, 191, 278, 310
– arsenide phosphide 273
– gallium arsenide 1, 50, 69, 78, 109, 166, 186, 191, 195, 216, 225, 246, 287, 293, 302
– gallium arsenide phosphide 50, 56, 64, 148, 173, 195, 210, 246, 273, 297
– gallium phosphide 1, 11, 221, 261
– organic 18, 42, 64, 69, 78, 162, 166, 173, 179, 195, 210, 221, 225, 235, 246, 273, 278, 297, 302
– phosphide 18, 42, 50, 162, 166, 173, 179, 195, 278, 287, 293, 297

Kinetics
– of adsorption 322, 338
– of decomposition 338
– of growth 18, 69, 109, 118, 127, 133, 200, 204, 246, 315, 322, 338, 344, 371, 376
– of interface control 18, 118, 278, 287, 293, 310, 355
– of nucleation 18, 118

Lasers, see Device characterization

Nitrogen
– organic 361

Phosphorus
– organic 1, 162
Precursor
– for aluminum gallium arsenide 11, 152
– for gallium arsenide 69, 127, 133, 138, 152
– for indium gallium arsenide 1, 69, 78, 133
– for indium gallium arsenide phosphide 148
– for indium gallium phosphide 1, 11

Quantum wells, see Device characterization

Selenium
– organic 371

Silicon 322, 328, 333, 338, 344, 349
– germanium 315, 355
Solar cells, see Device characterization
Superlattices, multilayers
– of III–V compounds 18, 56, 210, 268, 273, 287, 293, 297, 302, 310
Surface structure
– of gallium arsenide 114
– of metalorganic molecular beam epitaxy interface 118
– of III–V compounds 18

Tellurium
– organic 256
Thin film growth, epitaxy
– by gas source molecular beam epitaxy
– – of aluminum antimonide 310
– – of aluminum gallium indium phosphide 306
– – of aluminum phosphide 268
– – of gallium arsenide phosphide 282
– – of gallium indium phosphide 306
– – of gallium nitride 361
– – of gallium phosphide 268
– – of indium arsenide 310
– – of indium gallium arsenide 216, 287
– – of indium phosphide 287
– – of silicon 322, 328, 333, 338, 344
– – of silicon germanium 315, 355
– – of zinc selenide 366
– by laser-assisted metalorganic molecular beam epitaxy
– – of indium gallium arsenide phosphide 273
– by metalorganic molecular beam epitaxy
– – of aluminum antimonide 250
– – of aluminum arsenide 50
– – of aluminum gallium antimonide 250
– – of aluminum gallium arsenide 11, 152
– – of gallium antimonide 250
– – of gallium arsenide 37, 69, 99, 104, 109, 114, 127, 133, 138, 143, 152, 162, 200, 221, 230, 235, 241, 256, 261
– – of gallium nitride 37
– – of gallium phosphide 89
– – of indium aluminum arsenide 166
– – of indium arsenide 278
– – of indium gallium arsenide 1, 50, 69, 78, 109, 133, 166, 186, 195, 225, 293, 302
– – of indium gallium arsenide phosphide 50, 56, 64, 148, 173, 195, 210, 246, 297
– – of indium gallium phosphide 1, 11, 221, 261
– – of indium phosphide 42, 50, 162, 166, 173, 179, 195, 278, 293, 297
– – of III–V compounds 18, 29
– – of zinc selenide 371, 376
– – theory of 69, 83, 109, 127
– – theory of precursor design 118
– by molecular beam epitaxy
– of gallium arsenide 114, 191
– – of indium gallium arsenide 191
– by solid source molecular beam epitaxy
– – of silicon germanium 355
– by vapor phase epitaxy
– – through chemical vapor deposition
– – – of silicon 349
– – through metalorganic vapor phase epitaxy
– – – of indium gallium arsenide phosphide 56
– – through plasma-assisted epitaxy
– – – of indium antimonide 157
– – – of indium arsenide 157
– – – of zinc selenide 157
Three–five (III–V) compounds 18, 83

Zinc
– organic 371, 376
– selenide 157, 366, 371, 376